

Anterior Cervical Discectomy and Fusion



What is an Anterior Cervical Discectomy and Fusion?

Anterior cervical discectomy and fusion (ACDF) is a procedure performed through the front of your neck to remove a problematic disc in the spine and replace it with a spacer made of either bone, metal or plastic that will enable the bone above and below to fuse together. There are a number of issues that can be treated with ACDF. The most common problems include disc herniations or bone spurs from arthritis that push on nerves or the spinal cord. When a nerve is pinched this often causes pain, weakness or numbness in one or both of the arms. When the spinal cord is pinched this can cause problems such as difficulty using your hands, worsening balance or other issues with coordination. ACDF allows for removal of the disc or bone spurs that are causing the problem and, at the same time, can restore proper alignment and stability in the neck.

When is this surgery recommended?

When symptoms are due to pinched nerves or spinal cord in the neck, ACDF is often a great option. While there has been an increasing interest in the use of artificial disc replacements for the cervical spine, there are cases when an artificial disc replacement should not be recommended. For example, when there is painful arthritis in the cervical spine, particularly in the joints in the back of the neck known as facet joints, then an artificial disc replacement will continue to allow painful motion through those joints and a fusion procedure would provide better relief of that pain. Additionally, if there is abnormal alignment of the spine or instability between the two vertebrae/bones then a fusion is recommended.

What are the risks of the surgery?

In general, this surgery is considered safe, has extremely high success rates and high patient satisfaction ratings. However, particular risks (each of which is very rare) include nerve irritation or nerve injury, spinal cord injury, spinal fluid leak, fracture of the bone, failure of the surgery to provide relief of the symptoms, failure of the bones to fuse (known as pseudarthrosis), and/or difficulty swallowing (aka dysphagia, which is usually temporary).

What is the recovery like?

Each patient's recovery is unique and depends on a number of factors such as age, fitness, medical history, and preoperative pain medication requirement. In general, the surgery

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takes about 1 hour of surgical time for a one-level procedure. You should expect 1 night in the hospital; however, some patients may be candidates to discharge the same day after a short observation period. You will be prescribed at least 14 days of prescription pain medications to take at home and are encouraged to take full strength Tylenol (1,000mg in 4 doses daily for most patients) in addition. For 1 and 2 level fusions you may not need to wear a collar after surgery. But this can vary patient to patient. Most patients have some mild difficulty or discomfort with swallowing for a short period after the surgery and you should be mindful to give yourself extra time at meals, chew your food thoroughly, and avoid dry or tough foods. In cases where more than 2 levels are being fused a cervical collar will be provided which will be worn for approximately 6 weeks. This should be worn at all times other than eating and showering.

Most patients feel very good shortly after surgery and symptoms of pain that led to the surgery often improve immediately. This can lead patients to assume that they can return to any activity almost immediately. However, for the first 6 weeks you should avoid heaving lifting, pulling or pushing; high impact activities such as skiing, road biking, or other activities that put you at risk for falling, whiplash or other neck injuries. This is to protect the surgery and allow the body time to begin the fusion process.

How should I prepare for my surgery?

The most important thing is to stay active leading up to surgery. Eat a healthy, well-balanced diet, keep up whatever cardiovascular exercise you can such as walking, biking, elliptical etc. You may be instructed to perform some gentle neck manipulation to loosen up the tissues around your trachea and esophagus prior to the surgery to help decrease swallowing difficulties after the surgery. If you take other prescription medications, blood thinner, or supplements you should receive specific instructions on which medications to stop taking and when to stop taking them before your surgery.

Most importantly, as much as your recovery is a physical experience, for many it is also a mental and emotional experience as well. You have to be prepared for some discomfort, for some hard work, and for some mental and emotional toughness as you begin your journey to recovery. It is a process, with highs and lows, excitement and frustration – but ultimately it is about buying into the part you play in your recovery and in you eventually achieving your specific goals for your spine, your health, and your overall well-being.